EFFECT OF BUDGETARY PARTICIPATION AND BUDGET ADEQUACY ON INDIVIDUAL PERFORMANCE WITH JOB SATISFACTION AS AN INTERVENING VARIABLE

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Abstract
This study aims to examine the effect of budgetary participation and budget adequacy on individual performance with job satisfaction as an intervening variable. Sampling was conducted using purposive sampling method. Analysis of the research was conducted on 110 officials involved in budgeting in Aceh Utara (North Aceh) district administration. There are four variables measured in this study i.e. the budgetary participation, budget adequacy, job satisfaction and individual performance. Data analysis uses analysts track, supported by the application program AMOS 16 and SPSS 17. The model proposed in this study successfully meets the requirements for a model. The results of this study indicate that budgetary participation has a significant effect on individual performance, budgetary participation has a significant effect on job satisfaction, and budget adequacy has a significant effect on budget satisfaction, budget adequacy has a significant effect on individual performance. Budgetary participation and budget adequacy have significant effects on performance through job satisfaction.

Keywords: Budgetary participation, budget adequacy, job satisfaction, individual performance
INTRODUCTION

The economic conditions faced by the government currently requires local governments’ ability to survive and thrive, this capability depends on how local governments take appropriate decisions. Budget is an important component in local government planning. *Anggaran Pendapatan dan Belanja Daerah* or APBD (local budget revenue and expenditure) is formulated based on the performance approaches, namely a budget system that gives priority to the achievement of the works or the outputs of the cost allocation plan or the set inputs. Budget is also associated with human behavior, so that local governments should pay attention to aspects of the behavior to encourage every individual in the local government to be responsible for the formulation and implementation of the budget.

Budget does not only serve as a financial planning tool, but also as a mean of control, coordination, communication, performance evaluation and motivation and a tool to delegate authority from superior to the staff/subordinates (Hosfstede, in Marani 2002). According to Milani in Nor (2007) participatory budgeting is expected to improve the performance of individuals, that is when a goal is designed and jointly approved the employees will internalize the goals set and have a sense of personal responsibility for achieving the goals, because they were involved in drafting the budget. The results showed inconsistency between one studies with another.

Under the Law No. 2 of 2001 on the establishment of the Aceh Utara district, in accordance with Regulation Number 23 Year 2005 that mentions public organizations shall not give priority to profit-seeking. The budget prepared at the beginning of the period with the involvement of the head of sub-sections and budget staff. The involvement of the head of sub-sections in the preparation of the budget brings a positive impact on individual performance. Budget participation and adequacy will increase job satisfaction and performance of government officials in Aceh Utara district’s government.

In this research, author aims to carry out study research on the Public Authorities of North Aceh district consisting of Islamic Sharia Office, Department of Education, Youth and Sports Department, Department of Finance and Wealth Management Areas, Department of Population and Civil Registry, Public Health Service, Department of *Bina Marga, Cipta Karya*, Office of Water and Mineral Resources, Department of Industry and Trade, Cooperatives and Small and Medium Enterprises, Department of Agriculture and Livestock, Forestry and Plantations, Department of Social Welfare, Labor and Population Mobility, Department of Transportation, Tourism and Culture, Department of Marine and Fisheries, Market Department, Cleanliness and Landscaping.
Member of organizations will devote their power and mind to increase productivity if they were satisfied in the work. Job satisfaction is something coveted by every organization, so that job satisfaction can be controlled by each head of the organization, with a higher job satisfaction, then the individual performance will also increase. This study examined the effect of participation in budget preparation and budget adequacy on the performance through job satisfaction as an intervening variable. This study is a development of research carried out by Heriyati, Widi and Nasir (1993). Budgetary participation is the form of the involvement of subordinate individuals in the preparation of the company's overall budget. Individual performance is achievement which is achieved by an individual in carrying out his/her responsibilities. Job satisfaction is a feeling that is felt by an employee towards his job. Based on the explanation above, this research examines the effects of budgetary participation and budget adequacy of individual performance with job satisfaction as an intervening variable in the empirical study of Aceh Utara district government officers. The purpose of this study is to analyze the effect of budgetary participation on individual performance, the effect of budgetary participation on job satisfaction, budget adequacy impact on individual performance, the budget adequacy impact on job satisfaction and the effect of budgetary participation and budget adequacy of performance through job satisfaction.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Budgetary Participation and Individual Performance

Participation in the budgeting process is an effective approach to improve individual performance. According to Mulyadi (2001:513), participation is a process of joint decision-making by two or more parties that have an impact on future decision makers. Participation in budgeting is basically a manifestation and involvement of individuals and employees in the company's overall budget. Schiff and Lewin in Riyadi (2000:137), suggests that the prepared budget has two roles: Firstly, the budget serves as planning, in a way that the budget contains a summary of the financial plans of the organization in the future. Secondly, the budget serves as the performance criteria, in which the budget is used as a control system to measure individual performance.

Participatory budgeting is expected to increase the performance of the individual. The higher the level of individual involvement in the budgeting process, the performance will also be higher (Indriantoro, 2000). High individual performance can improve overall organizational performance. Achievement of individual performance related to the achievement of a series of individual tasks. Higher performance means increased efficiency, effectiveness, or higher quality of the completion of a series of tasks assigned to individuals within the company or
organization. This study stated that participation can improve the performance of individual budgets, therefore the hypothesis presented in this study is:

**H1:** Budgetary Participation affects individual performance.

**Budgetary Participation and Job Satisfaction**

Participatory budgeting is necessary as a means of communication within the company. Achievement of individual performance in the preparation of the budget is largely affected by job satisfaction of the drafters of the budget. Budgetary participation has consequences for attitudes and behavior of members of the organization (Murray in Sumarno, 2005). Utomo (2006) in Bornadi (2006) suggested if budgetary participation is not properly implemented, it can encourage subordinates/budget implementer to do budget gap. According to Brownell (1982) in Sumarno (2005), the budgetary participation is the level of involvement and influence of individuals in budget formulation. While Chong in Bornadi (2006) refers participation as a process by which subordinate/budget implementer are given the opportunity to be involved in and influence in the budgeting process. Opportunity provided is believed to increase job satisfaction and the sense of involvement of the budget implementer. The result demonstrates the employees who are involved reach significant job satisfaction compared to than individuals who were not involved in compiling the budget. Therefore, the hypothesis of this research is:

**H2:** Budgetary participation affects job satisfaction.

**Budget Adequacy and Job Satisfaction**

Job satisfaction can be understood through three aspects. First, job satisfaction is a form of employees' response to the conditions of working environment. Second, job satisfaction is often determined by the results of the work or performance. Third, job satisfaction associated with other attitudes and owned by each employee (Luthans, 1995). According Luthan (1995) job satisfaction has three dimensions. First, satisfaction is intangible (invisible), but it can be expected. Second, job satisfaction is often determined by the extent to which the work meets one's expectations. Expectations towards the fulfillment of the budget adequacy will increase job satisfaction. Third, job satisfaction reflects the relationship with various other attitudes of individuals. Budget adequacy is the level of leaders’ perception on the established budget is sufficient to carry out work activities that will support the achievement of corporate objectives. Therefore, the hypothesis in this study is:

**H3:** The budget adequacy significantly influences the budget satisfaction.
Budget Adequacy and Individuals Performance

In the management literatures several studies have raised the issue of how the budget adequacy could facilitate or interfere with the individuals performance (Peters et al), as quoted by Nouri and Parker in Hariyanti (2002:688). The research carried out by peters et al using questionnaires that asked employees to describe the business area situational factors that facilitate or interfere with their performance. One of these situational factors is that budget support is needed to perform their duties.

Research of Nouri and Parker (in Hariyanti, 2002:688) shows that if budget adequacy is associated with job performance, it has a positive relationship. With the budget adequacy then the employee will complete the job well. Thus, the performance will increase. Therefore, the hypothesis of this research is:

H4: Budget adequacy effects on individual performance significantly.

The Effect of Budget Adequacy and Budgetary Participation on Individual Performance through Job Satisfaction

Participation by many experts is often referred to as a process of joint decision-making by two or more parties, which takes effect in the future for those who make the decisions. Budgetary participation is the extent influence and involvement of the employees in budgeting (Milani et al, 1975 in Supriyono, 2006). The individuals interests on job satisfaction tend to focus on the effective of employee performance. Performance and satisfaction of employees will most likely be higher if the values are in accordance with organization (Robins, 1996:185). The individual cannot create conditions that lead to job satisfaction now and then ignored it for several years. Job satisfaction can be decreased as soon as possible so that the individuals are required to pay attention at all times. Job satisfaction is part of life satisfaction. The nature of one's environment outside of work affects feelings inside job. Because the work is an important part of life, job satisfaction affects a person's life satisfaction. The individuals may not only need to monitor the work and direct the work environment but also to monitor their employees' attitudes toward the other parts of life.

Aldefer theory is a theory of motivation that emphasizes that every individual has a need for the existence, relevance and growth. Aldefer theory suggests that individuals will be motivated to do something to meet any of the devices needs. High job satisfaction will drive the higher individual performance. Therefore, the hypothesis of this research is:

H5: Budgetary participation and budget adequacy affects job performance through satisfaction
RESEARCH METHODOLOGY

Population and Study Sample
The selected population in this study is the whole apparatus involved in the preparation of the budget in Aceh Utara district administration. The sampling was purposive sampling, so that the sampling is done by a logical representation. Thus, the sample in this study are the officers involved in the preparation of the budget comprises of 16 heads of agencies, 48 heads of subdivisions and 46 head of divisions involved in the budgeting process at the government institution of Aceh Utara district. Research data required is the primary data. A total of 110 questionnaires were distributed to the intended respondents. The expected rate of return 100% so that it will reach the number of studied samples.

Variables Operational Definition

1. Budgetary Participation
Budgetary participation is the level of involvement and influence of individuals in the preparation of the budget. It is measured by using Likert scale. To measure participation in budget preparation list of questions instrument compiled by Kenis (1979) is used.

2. Adequacy of budget
Budget adequacy is the perception level of leaders that the established budget is sufficient to carry out work activities that will support the achievement of corporate objectives. Budget adequacy is measured using a questionnaire instrument which was developed by Nouri & Pouker (Supriyono, 2006).

3. Job Satisfaction
Job satisfaction shows individual emotional reactions to their works and their working experiences. Job satisfaction is one’s attitude toward the job (Kreitner and Kinicki, 2001). Several questions regarding job satisfaction are developed and measured using five scales: very dissatisfied, dissatisfied, neutral, satisfied and very satisfied. The variable of job satisfaction was measured using the Minnesota Satisfaction Questionnaire (MSQ) which was adopted from the study of Basri (2000).

4. Individual Performance
Individual performance in this study is the performance of individual activities that include job satisfaction, organizational goals and objectives of the work, performance assessment and
feedback, and opportunities development. It is measured using a Likert scale. Individual performance is measured using instruments developed by Lindholm, Niklas (2000)

**Data Analysis Methods**

Classical assumption test, validity and reliability test are performed on the data of this research prior to analysis. Analysis of the data uses Path Analysis supported by the application AMOS program version 16.0.

**Hypothesis Testing**

In this research, hypothesis testing is done by using the path analysis supported by applications of Analysis of Moment Structure (AMOS) 16.0. Hypothesis testing is by measuring against value Critical Ratio (CR) contained in the Regression Weight that has a value greater than 2 or significance level test of the hypothesis that less than 5% (Ferdinand, 2002:141).

**ANALYSIS & FINDINGS**

**Overview of Respondents**

The presentation of data concerning the identity of respondents is aimed to provide an overview of the situation on the respondent. The figures of sample respondents in this study are classified by age, sex, marital status, education, period of employment, and monthly income. There are 84 men and 26 women in this study. 4 of them are 25-30 years old or 4%, 30 persons of 31-35 years or 27%, 34 persons of 36-40 years old or 31% and 42 person of >40 or 38%.

**Data Quality Test**

**Reliability Test**

Reliability is actually a measure of a questionnaire which is an indicator of the variables or constructs. A construct or a variable is said reliable if they provide Cronbach Alpha values > 0.50. Cronbach Alpha values obtained from Cronbach Alpha test result value for the budgetary participation variable, budget adequacy, job satisfaction and individual performance, as shown in table 1 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach Alpha</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgetary Participation</td>
<td>0.631</td>
<td>Reliable</td>
</tr>
<tr>
<td>Budget Adequacy</td>
<td>0.662</td>
<td>Reliable</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>0.556</td>
<td>Reliable</td>
</tr>
<tr>
<td>Individual Performance</td>
<td>0.759</td>
<td>Reliable</td>
</tr>
</tbody>
</table>
Validity Test
Tests are performed to determine whether the validity of measuring instruments that are (made) are valid or not. Validity test is done by looking at the correlation between the scores of each question item with the total score (item total correlation) variables. Calculations are performed with the product moment correlation formula. If the validity value is more than 0.3 then the question is said to be valid. If the results of testing the validity of the questions on the budgetary participation, budget adequacy, budget satisfaction and individual performance are above the critical value of 0.3 then the whole question in this study are valid.

Normality Test
The results of the data output by using a normality test by graphical analysis, the shows the following obtained results:

Figure 1. Normality Test

![Histogram](image)

**Dependent Variable: Performance**

- Mean = 6.18E-15
- Std. Dev. = 0.98
- N = 110

**Normal P-P Plot of Regression Standardized Residual**

- Observed Cum Prob
- Expected Cum Prob
The two graphics show that the regression model fulfills the normality assumptions. Another normality test is carried out by non-parametric statistical Kolmogorov-Smirnoff (KS) test. Based on the output data shown in Attachment (3) by using normality a test by means of statistical tests, the obtained results are:

<table>
<thead>
<tr>
<th>Normal Parameters</th>
<th>Mean</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>.223</td>
<td></td>
</tr>
<tr>
<td>Most Extreme</td>
<td>Absolute</td>
<td>.085</td>
</tr>
<tr>
<td>Differences</td>
<td>Positive</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>-.048</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>.868</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.439</td>
<td></td>
</tr>
</tbody>
</table>

The results of Kolmogorov-Smirnoff test provides value of 0.868 with probability of 0.439 far above the \(= 0.05\), thus it can be concluded that the residual data are distributed normally. The results are consistent with previous test.

**Multicollinearity Test**

Multicollinearity test aims to examine whether the regression finds correlation between the independent variables. In a good regression model should not be a correlation between the independent variables. If the independent variables are correlated, then these variables are not orthogonal.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Individual Performance</td>
<td>.014</td>
<td>.677</td>
</tr>
<tr>
<td>Budgetary Participation</td>
<td>.545</td>
<td>.677</td>
</tr>
<tr>
<td>Budget Adequacy</td>
<td>.000</td>
<td>.720</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.742</td>
<td>.724</td>
</tr>
</tbody>
</table>

From the results if the data processing through SPSS it is found out that the results of multicollinearity test obtained on the column tolerance and VIF indicates that serious multicollinearity does not happen. No tolerance value less than 0.10 and no VIF value
exceeding 10, thus it can be said that multicollinearity does not happen between independent variables in the regression model.

**Heteroskedastisitas Test**

From the scatterplot graph below, it can be seen that dots spread randomly, and scattered both above and below zero (0) on the axis Y. It can be concluded that there was no heterokedastisitas at the regression model, so that regression model can be used to predict the dependent variable based on the independent variable input.

![Scatterplot Graph](image)

**Hypothesis Testing**

![Path Analysis Diagram](image)
*Goodness of fit* indicator models in this study uses *Path Analysis* with applications *Analysis of Moment Structure* (AMOS) as shown in Table 4 below:

<table>
<thead>
<tr>
<th>Goodness of Fit Indicators</th>
<th>Required Values</th>
<th>The Result Tests in this Research</th>
<th>Model Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>χ²- Chi-Square</td>
<td>Expected to be small</td>
<td>0.151 (smaller than df 1 = 3.841)</td>
<td>good</td>
</tr>
<tr>
<td>DF</td>
<td>Positive</td>
<td>1</td>
<td>good</td>
</tr>
<tr>
<td>Probability</td>
<td>≥ 0.05</td>
<td>0.627</td>
<td>good</td>
</tr>
<tr>
<td>CMIN/ DF</td>
<td>≤ 2.00</td>
<td>0.151</td>
<td>good</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td>0.977</td>
<td>good</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td>0.989</td>
<td>good</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.95</td>
<td>1.042</td>
<td>good</td>
</tr>
<tr>
<td>CFI</td>
<td>≥ 0.95</td>
<td>0.970</td>
<td>good</td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤ 0.08</td>
<td>0.065</td>
<td>good</td>
</tr>
</tbody>
</table>

Test of the proposed model shows that this model is consistent with the available data, the index is within the range of expected values, based on the existing range of values it can be said that the overall model shows a good level of relevancy, thus it can be stated that the model can be well accepted.

The following Table 5 presents the *critical ratio* value of each variable in this study. The minimum absolute value is ≥ 2 and significance level of 0.05 is said to support of the hypothesis.

**Table 5. Regression Weight**

<table>
<thead>
<tr>
<th>Name Variable of</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP -------&gt; IP</td>
<td>0.377</td>
<td>0.090</td>
<td>4.201</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>BP -------&gt; JS</td>
<td>0.336</td>
<td>0.131</td>
<td>2.574</td>
<td>0.010</td>
<td>Significant</td>
</tr>
<tr>
<td>BA -------&gt; JS</td>
<td>0.377</td>
<td>0.114</td>
<td>3.310</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>BA -------&gt; IP</td>
<td>0.354</td>
<td>0.080</td>
<td>4.439</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>JS-------&gt;IP</td>
<td>0.383</td>
<td>0.064</td>
<td>5.983</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Testing Hypothesis 1**

Hypothesis 1 states that budgetary participation affects individual performance. The test results found the effect of budgetary participation on the individual performance of 4.201. It is indicated by the *Critical Ratio* (CR) which is 4.201 greater than 2 (CR <2) and the value of 0.000 p-value lesser 0.05 (p < 0.05). So the first hypothesis of this research is proven (Ha accepted). The results of this study indicate that budgetary participation affects individual performance.
Testing Hypothesis 2
Hypothesis 2 states that budgetary participation affects job satisfaction, meaning that the higher the budgetary participation will lead to the higher job satisfaction. The results of tests performed shows the value of CR in the regression weight of 2.574 (CR> 2) and the p-value of 0.010 (p <0.05). The value indicates there is significant influence between variable budgetary participation and job satisfaction.

Testing Hypothesis 3
Hypothesis 3 states that budget adequacy affects individual performance, meaning the more one feels that the budget is adequate then the higher the job satisfaction will be. The results of tests performed shows the value of CR in the regression weight of 3.310 (CR> 2) and the p-value of 0.000 (p <0.05). The value indicates there is significant influence between the variables of budget adequacy and job satisfaction.

Testing Hypothesis 4
Hypothesis 4 states that the budget adequacy affects individual performance. Testing of this hypothesis aims to determine whether the higher levels of job satisfaction has an effect on increasing job satisfaction. The results of tests performed shows the critical ratio of 4.439 and the p-value of 0.000 (p <0.05). This result indicates there is significant influence between the variables of budget adequacy and individual performance.

Testing Hypothesis 5
Hypothesis 5 states that job satisfaction is an intermediate variable for the connection of the budgetary participation and the budget adequacy on the individual performance. Baron & Kenny (in Supriyono, 2006) state that a variable functions as an intermediary variables (intervening or mediating) if: (1) the independent variables significantly affect the intermediate variables, (2) the intermediate variables significantly affect the dependent variable, and (3)the influence of independent variables on the dependent variables decreased after controlled by intermediary variables.

The test results found the first evidence of a significant influence budgetary participation on job satisfaction. The second significant influence on job satisfaction of budget adequacy on job satisfaction and job satisfaction on individual performance which is indicated by the Critical Ratio (CR) is 5.983 (CR> 2) and the p-value of 0.000 (p <0.05). Based on the results of this study, it can be concluded that job satisfaction is an intermediate variable for interconnection between the budgetary participation and budget adequacy on the individual performance.
Analysis of Influence
The research model used shows two kind of effects among the variables, i.e: direct and indirect. It is indicated by the table 6. From the Table, it appears that the total of effect is the sum of direct and indirect effects.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Total of Effect</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP --- &gt; JS</td>
<td>0,294</td>
<td>0,294</td>
<td>0,000</td>
</tr>
<tr>
<td>BP --- &gt; JS</td>
<td>0,229</td>
<td>0,229</td>
<td>0,000</td>
</tr>
<tr>
<td>BA --- &gt; JS</td>
<td>0,440</td>
<td>0,313</td>
<td>0,127</td>
</tr>
<tr>
<td>BP --- &gt; JS</td>
<td>0,390</td>
<td>0,291</td>
<td>0,099</td>
</tr>
<tr>
<td>JS --- &gt; IP</td>
<td>0,470</td>
<td>0,433</td>
<td>0,000</td>
</tr>
</tbody>
</table>

CONCLUSION
Based on the analysis and discussion described above, it can be concluded that the results of this study successfully support all hypotheses. The results of this study indicate that budgetary participation significantly affects the individuals' performance. Budgetary participation affects on job satisfaction. Budget adequacy significantly affects on budget satisfaction, budget adequacy significantly effects on individual performance. Budgetary participation and budget adequacy significantly effect on performance through job satisfaction. The model proposed in this study successfully meet the requirement of a fit model.

IMPLICATIONS
This study has implications for the parties related to the individual performance of the government apparatus in the budget preparation at the Aceh Utara district. This study shows that the variables which greatly affect the performance are budgetary participation, budget adequacy and job satisfaction.

LIMITATIONS
This study has several limitations. Firstly, the absence of random sampling, hence there is a possibility that the sample does not reflect the actual population. Secondly, the weakness of the survey method, many times respondents did not answer the questions honestly and not seriously, so that there is tendency of the answer to be biased. Thirdly, the samples obtained in this study are not evenly distributed by characters.
FUTURE RESEARCH

Authors suggested that future research may improve the weaknesses in this study. Further research is recommended to use other methods that can overcome the weakness in survey methods. Future research is advised to pay attention to the manner in distributing questionnaires, so that the characteristic of obtained sample is more evenly. Following that, the future research is suggested to add other variables, so that a more complete model will be obtained.

REFERENCES


